

# Amana®

Heating • Air Conditioning

*A higher standard of comfort*

## GUD-X High Efficiency Gas Fired Warm Air Furnace

## Specification Sheet

Affix this Specification Sheet, Installation Instructions and User Information manual adjacent to the unit.

Model Number	Input (BTUH)	Output (BTUH)	AFUE	Temp. Rise Range, °F	Number of Burners	Minimum Circuit Ampacity <sup>1</sup>	Maximum Overcurrent Protection <sup>2</sup>	Blower			AC Tons @ .5 ESP	Pressure Switch Setting (Inches W.C.) <sup>3</sup>	Shipping Weight (lbs)
								D" x W"	HP	Speeds			
GUD045X30B	45,000	43,000	95.6	25-55	2	11.3	15	10X8	1/3	3	2.0-3.0	-1.38	158
GUD070X30B	70,000	65,700	93.8	35-65	3	10.3	15	10X8	1/3	4	2.0-3.0	-1.38	194
GUD070X40B	70,000	65,700	93.8	35-65	3	14.1	15	10X10	3/4	4	3.0-4.0	-1.38	194
GUD090X35B	90,000	84,300	93.7	45-75	4	10.1	15	10X8	1/2	4	2.0-3.5	-1.57	216
GUD090X50B	90,000	85,100	94.6	35-65	4	15.1	20	10X10	3/4	4	3.5-5.0	-1.57	216
GUD115X50B	115,000	107,600	93.6	35-65	5	15.1	20	10X10	3/4	4	3.5-5.0	-1.38	231

<sup>1</sup> Minimum Circuit Ampacity = (Circulating Blower Amps x 1.25) + I.D. Blower Amps

<sup>2</sup> Maximum Overcurrent Protection refers to maximum recommended fuse or circuit breaker size.

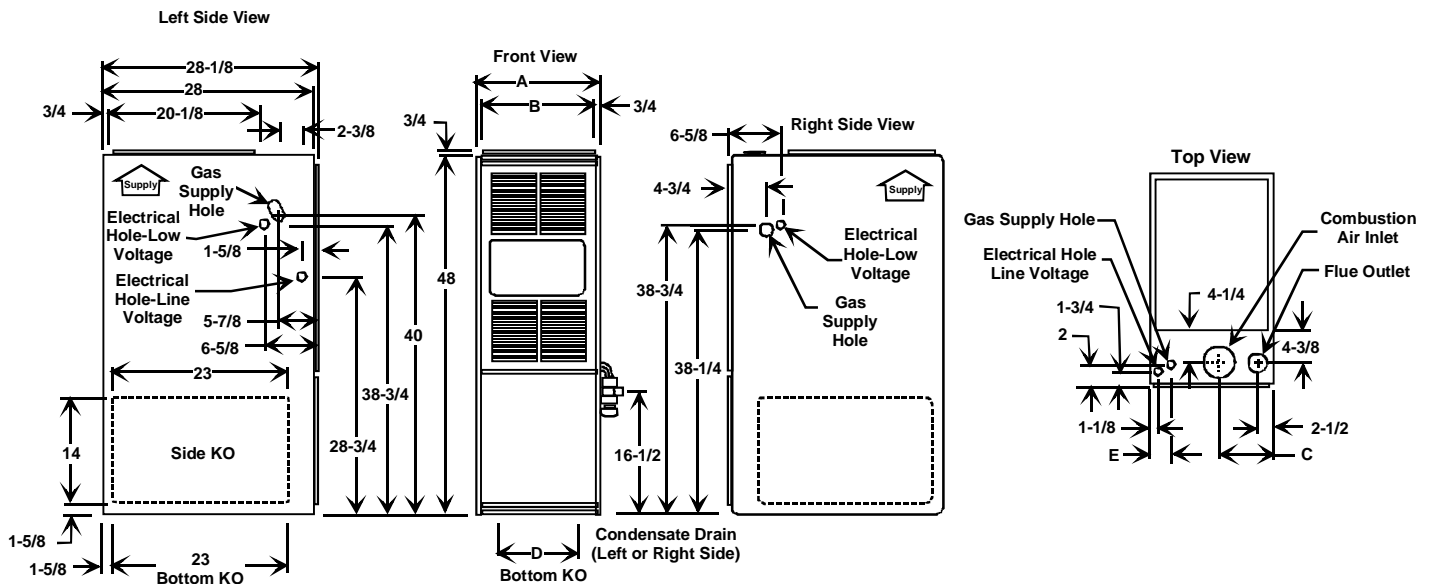
<sup>3</sup> As shipped for installations below 4,000 feet.

### Dimensions



### WARNING

To avoid death, personal injury or property damage due to fire, do not exceed maximum recommended fuse or circuit breaker size.



Due to continuous engineering design and development, the above information is subject to change without notice.

Size	A	B	C	D	E
45	16-1/2	15	7	10-1/2	2-5/8
70	20-1/2	19	11	14-1/2	2-5/8
90	24-1/2	23	10-1/2	18-1/2	4-5/8
115	24-1/2	23	12-1/2	18-1/2	2-5/8

Amana

Fayetteville, TN 37334

All dimensions are in inches.

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Model (Htg. Speed As Shipped)	Motor Speed	Tons AC at .5" ESP	External Static Pressure, Inches Water Column												
			0.1		0.2		0.3		0.4		0.5		0.6	0.7	0.8
			CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	RISE	CFM	CFM	CFM
GUD045X30B (MED)	HIGH	3.0	1381	28	1319	29	1260	30	1197	32	1131	34	1055	960	847
	MED	2.5	1173	33	1142	34	1103	35	1055	36	998	38	931	848	736
	LOW	2.0	908	42	901	43	884	43	855	45	815	47	760	688	602
GUD070X30B (HIGH)	HIGH	3.0	1458	41	1395	43	1334	45	1266	47	1188	50	1111	1015	895
	MED	2.5	1270	47	1229	49	1178	51	1122	53	1060	56	986	898	778
	MED-LO	2.0	1019	59	1001	60	973	61	938	64	891	-----	831	750	649
	LOW	1.5	782	-----	778	-----	766	-----	746	-----	708	-----	659	590	501
GUD070X40B (MED-LOW)	HIGH	4.0	1861	-----	1803	-----	1714	35	1647	37	1561	39	1457	1278	1063
	MED	3.5	1699	36	1643	37	1577	38	1512	40	1431	42	1312	1164	977
	MED-LO	3.5	1519	40	1482	41	1439	42	1386	44	1316	46	1196	1063	903
	LOW	3.0	1278	47	1277	47	1268	48	1227	49	1164	52	1069	937	839
GUD090X35B (MED)	HIGH	4.0	1664	47	1599	49	1532	51	1465	53	1395	56	1312	1234	1150
	MED	3.5	1465	53	1439	54	1395	56	1345	58	1288	60	1218	1145	1048
	MED-LO	3.0	1089	71	1108	70	1106	70	1092	71	1059	73	1021	961	883
	LOW	2.5	850	-----	845	-----	841	-----	834	-----	823	-----	801	759	688
GUD090X50B (MED)	HIGH	5.0	2271	-----	2184	36	2094	37	2000	39	1914	41	1810	1701	1552
	MED	4.5	1951	40	1889	41	1837	42	1770	44	1701	46	1598	1489	1353
	MED-LO	4.0	1724	45	1695	46	1647	47	1598	49	1534	51	1412	1362	1236
	LOW	3.5	1495	52	1474	53	1448	54	1407	55	1356	57	1289	1196	1036
GUD115X50B (HIGH)	HIGH	5.0	2358	42	2228	44	2094	47	1997	49	1896	52	1800	1680	1552
	MED	4.5	1922	52	1869	52	1810	55	1743	57	1688	59	1583	1488	1364
	MED-LO	4.0	1699	58	1672	59	1630	61	1583	63	1526	65	1454	1369	1248
	LOW	3.5	1475	-----	1462	-----	1441	-----	1414	-----	1369	-----	1317	1232	1067

**NOTES:**

- CFM information in the above table is with high velocity, permanent filter(s) as shipped with the furnace. If the furnace is shipped with two side return filters, this table assumes both filters are used.
- All furnaces ship as high speed for cooling. Installer must adjust blower speed as needed.
- For most jobs, about 400 CFM per ton when cooling is desirable.
- This chart is for furnaces installed at 0 - 4000 feet. At higher altitudes, a properly derated unit will have the same temperature rise at a particular CFM, while the ESP at that CFM will be lower.
- The shaded area ( ) indicates ranges in excess of maximum external static pressure allowable when heating. For satisfactory operation, external static pressure should not exceed 0.5" W.C. The data for 0.6" W.C. to 0.8" W.C. is shown for air conditioning purposes only.
- The dashed (-----) areas indicate a temperature rise not recommended for this model.
- The installation must be adjusted to obtain a temperature rise within the range listed on the furnace nameplate.

## Accessibility Clearances (Minimum)



### WARNING

To avoid death, personal injury or property damage due to fire, clearances to combustible surfaces listed as below must be observed.

36 inches front clearance is required for servicing or cleaning.

**NOTE:** In all cases, accessibility clearance must take precedence over clearances from the enclosure where accessibility clearances are greater.

CLEARANCES TO COMBUSTIBLE SURFACES GUD_MODEL FURNACES (Inches)			
FRONT	3	TOP	1
RIGHT	1	FLUE	0
LEFT	1	FLOOR	C
REAR	0	----	----

C = If placed on combustible floor, floor **MUST** be wood only.

## High Altitude Installations

For installations above 4000 feet, please refer to your Amana distributor for required kit(s).

Gas	Altitude	Kit	Orifice	Manifold Pressure
Natural	0-4000 Ft.	None	#43	3.5" W.C.
Propane	0-4500 Ft.	LPTK09	#55	10.0" W.C.

**NOTE:** In Canada, gas furnaces are certified to 4,500 feet only.

### IMPORTANT NOTES:

- All furnaces have a redundant gas valve and blower door interlock switch.
- All furnaces are manufactured for use on 115 VAC, 60 Hz, single phase electrical supply.
- IMPORTANT:** While the data is presented as a guide, it is very important to properly size fuses and wires and make electrical connections in accordance with the National Electrical Code and/or all existing local codes.
- Performance figures are based on Department of Energy information and requirements under continuous operating conditions. Performance will vary with weather conditions and use.

- Drain connections must conform to local codes.
- Installer must supply the following gas line fittings according to which entrance is used:

Top	Two 90° Elbows One Close Nipple
Left	One 90° Elbow
Right	One 90° Elbow One 45° Elbow One Close Nipple

## Flame Sensor

Flame sensor output is 1 to 4 microamps at 115 volts.

## Filters

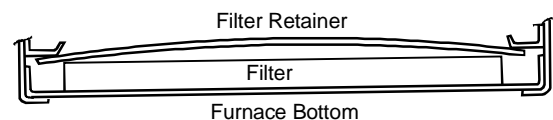
Side Return Filters Minimum Recommended Size		
Size_Air Flow	Disposable*	Permanent*
045_30	1 - 24x24 (576)	1 - 16x25 (280)
070_30	1 - 24x24 (576)	1 - 16x25 (280)
070_40	2 - 16x25 (768)	1 - 16x25 (372)
090_35	2 - 14x25 (692)	1 - 16x25 (342)
090_50	2 - 20x25 (960)	2 - 16x25 (465)
115_50	2 - 20x25 (960)	2 - 16x25 (465)

\* Quantity - Inches (Total Minimum Surface Area in Square Inches)  
Permanent filter sizes are as shipped with furnace. The minimum permanent filter size area is based on allowable face velocity of 620 feet per minute.

Bottom Return Filter Sizes		
Model	Filter Size (Inches)	Type
45	14 x 25 x 1	P
70	16 x 25 x 1*	P
90	20 x 25 x 1	P
115	20 x 25 x 1	P

P = Permanent  
\* As Shipped With Furnace

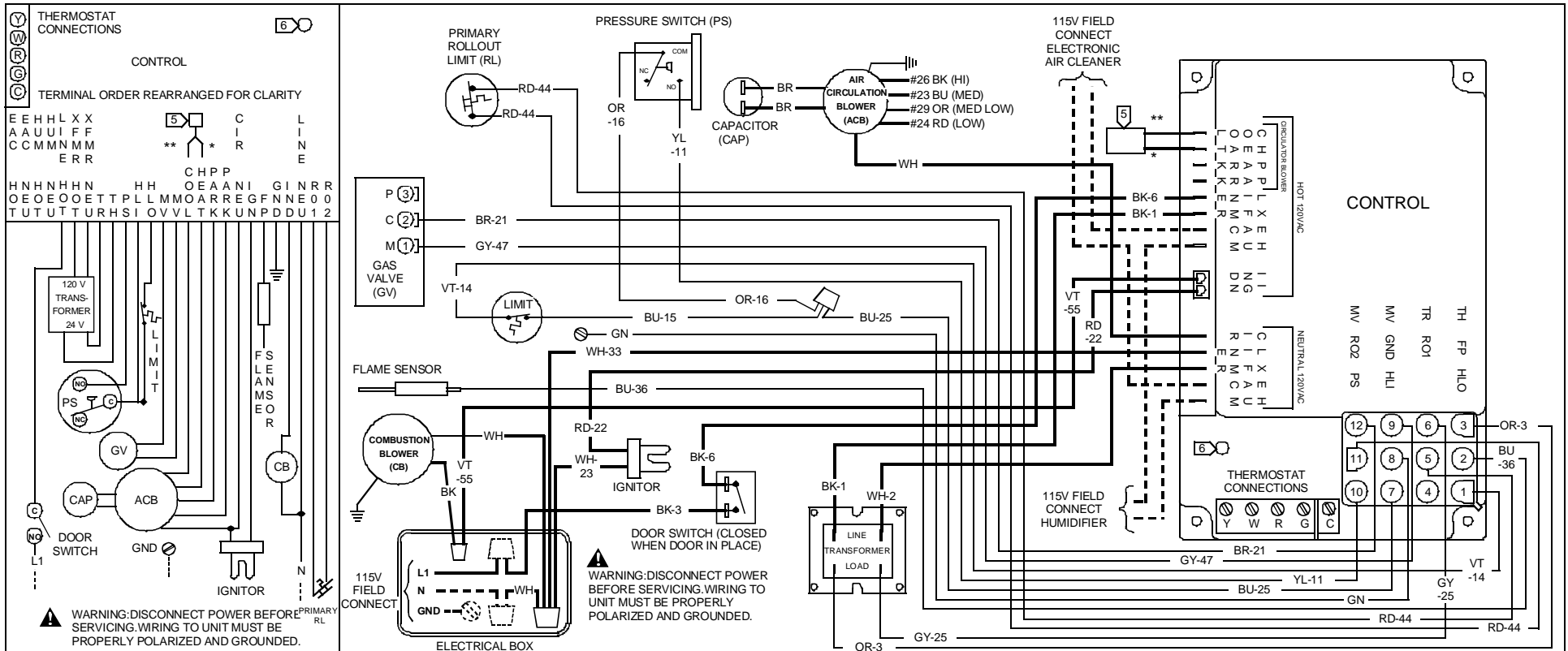
The figure below shows how the filter is retained over the bottom return air opening.



**Filter Retainer**

# WARNING

To prevent death, personal injury or property damage due to electrical shock, disconnect electrical power to this furnace before servicing or performing maintenance.



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FACTORY WIRED BLOWER MOTOR TO CONTROL CONNECTIONS			
FURNACE MODEL	* HEATING BLOWER SPEED		** COOLING BLOWER SPEED
* MANUFACTURER'S VARIABLE LETTER	SPEED	MOTOR TO "HEAT"	MOTOR SPEEDS
GUX: 045X30*	LOW	RD-24	3
GUC: 070X40*	LOW	RD-24	4
GUC: 045X30*	MED	BU-23	3
GUD: 045X30*			
GUX: 070X40*	MED LOW	OR-29	4
GUC: 090X50*			
GUD: 070X40*			
GUX: 070X30*,090X50*	MED	BU-23	4
GUD: 090X35*,090X50*			
GUX: 090X35*,115X50*	HI	BK-26	4
GUC: 070X30*,115X50*			
GUD: 070X30*,115X50*			

**IMPORTANT:**  
READ BEFORE OPERATING OR SERVICING THIS UNIT.

- SET HEAT ANTICIPATOR ON ROOM THERMOSTAT AT 0.7 AMPS.
- AMANA SPECIFIED REPLACEMENT PARTS MUST BE USED WHEN SERVICING.
- IF ANY OF THE ORIGINAL WIRE AS SUPPLIED WITH THE FURNACE MUST BE REPLACED, IT MUST BE REPLACED WITH WIRING MATERIAL HAVING A TEMPERATURE RATING OF AT LEAST 105C. USE COPPER CONDUCTORS ONLY.
- UNUSED BLOWER MOTOR LEADS MUST BE PLACED ON "PARK" TERMINALS OF CONTROL OR TAPED.
- IF HEATING AND COOLING BLOWER SPEEDS ARE NOT THE SAME DISCARD JUMPER BEFORE CONNECTING BLOWER LEADS.
- DIAGNOSTIC LIGHT: STEADY=REPLACE CONTROL; 1 FLASH=LOCKOUT; 2 FLASHES=PS STUCK CLOSED; 3 FLASHES=PS STUCK OPEN; 4 FLASHES=OPEN HIGH LIMIT SWITCH; 5 FLASHES=OPEN ROLLOUT CONTROL; CONTINUOUS FLASHING=FLAME-NO CALL FOR HEAT

**COLOR CODE**  
 YL YELLOW  
 OR ORANGE  
 VT VIOLET  
 GN GREEN  
 BK BLACK  
 BR BROWN  
 WH WHITE  
 BU BLUE  
 GY GRAY  
 RD RED

LOW VOLTAGE ———  
 LOW VOLTAGE FIELD - - - - -  
 HI VOLTAGE ———  
 HI VOLTAGE FIELD - - - - -